Complying with the Long Term 2 Enhanced Surface Water Treatment Rule: Small Entity Compliance Guide

One of the Simple Tools for Effective Performance (STEP) Guide Series

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NOTICE

This guide was prepared pursuant to section 212 of the Small Business Regulatory Enforcement Fairness Act of 1996 ("SBREFA"), Pub.L. 104-121. This document is intended solely as a guide to aid you in complying with the Long Term 2 Enhanced Surface Water Treatment Rule (71 FR 654). In any civil or administrative action against a small business, small government, or small non-profit organization for a violation of the Long Term 2 Enhanced Surface Water Treatment Rule, the content of this guide may be considered as evidence of the reasonableness or appropriateness of proposed fines, penalties, and/or damages. EPA may decide to revise this guide without public notice to reflect changes to EPA's approach to implementing the Long Term 2 Enhanced Surface Water Treatment Rule or to clarify or update text. To determine if EPA has revised this guide and/or to obtain copies, contact EPA's Small Business Ombudsman Office at (800) 368-5888 or (202) 566-2822 (Washington DC metropolitan calling area)or the Office of Ground Water and Drinking Water Safe Drinking Water Hotline at (800) 426-4791 (e-mail:hotline-sdwa@epa.gov).

The statutory provisions and EPA regulations presented in the Long Term 2 Enhanced Surface Water Treatment Rule contain legally binding requirements. This document is not a regulation itself, nor does it change or substitute for those provisions and regulations. It does not impose legally binding requirements on EPA, states or public water systems. While EPA has made every effort to ensure the accuracy of the discussion in this guidance, the obligations of the regulated community are determined by states, regulations or other legally binding requirements. In the event of a conflict between the discussion in this document and any statute or regulation, this would not be controlling.

The general descriptions provided here may not apply to particular situations based on circumstances. Interested parties are free to raise questions and objections about the substance of this guidance and the appropriateness of the application of this guidance to a particular situation. EPA and other decision-makers retain the discretion to adopt approaches on a case-by-case basis that differ from those described in this guidance where appropriate.

Contents

Additional copies of this guide are available from the Safe Drinking Water Hotline at (800) 426-4791. You can also download the guide from EPA's Safe Drinking Water Web site at www.epa.gov/safewater/smallsys/ssinfo.htm.

Acronyms

DBP	Disinfectants and Disinfection Byproducts Rule
DWSRF	Drinking Water State Revolving Fund
EPA	United States Environmental Protection Agency
FR	Federal Register
GWUDI	Ground water under the direct influence of surface water
LT1ESWTR	Long Term 1 Enhanced Surface Water Treatment Rule
LT2ESWTR	Long Term 2 Enhanced Surface Water Treatment Rule
mg/L	Milligrams per liter
PWS	Public water system
SBREFA	Small Business Regulatory Enforcement Fairness Act
SDWA	Safe Drinking Water Act
SWTR	Surface Water Treatment Rule

STEP #1 - Is this Guide for Me?

This guide is designed for owners and operators of public water systems serving 10,000 or fewer persons that are required to comply with the Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR). The LT2ESWTR applies to all public water systems (both community and non-community) that are supplied by a surface water source and by ground water sources under the direct influence of surface water (Subpart H systems), including wholesale and consecutive water systems. Consecutive systems include all systems that buy or otherwise receive some or all of their finished water from another public water system on a regular basis.

Systems:	All PWSs, including wholesale systems and consecutive systems
Sources:	Surface water and ground water under the direct influence of surface water
Population Served:	All sizes
Treatment:	All treatment including unfiltered systems

Systems that will typically find this guide useful include:

- Small towns
- Rural water districts
- Tribal systems
- Manufactured housing parks
- Home owners associations
- Small private systems
- Factories, schools, and religious institutions that have their own water supplies

Contact your state for guidance if you are uncertain if your source is ground water under the direct influence of surface water.

STEP #2 - What Will I Learn?

As a public water system's owner or operator, your most important job is protecting the health of your customers. This guide will help you in this job by providing information about:

- How the LT2ESWTR affects your system.
- What source water monitoring is required under the LT2ESWTR and how it is conducted.
- What the results of source water monitoring mean for your plant.
- A "toolbox" of treatment options to reduce *Cryptosporidium* in the water you deliver to customers.
- Requirements for uncovered finished water reservoirs under the LT2ESTWR.
- What to report to your state or EPA and customers.
- Sources of funding for your LT2ESWTR compliance strategy.

Appendix A contains a glossary of terms used both in the rule and in this guide. Appendix D lists additional resources on the LT2ESWTR that you might find helpful and detailed instructions on how to order them, including how to get a complete copy of the rule. Appendix E lists primacy agency contacts for states and Tribes. Appendix F identifies other STEP guides that EPA has developed to assist small systems.

STEP# 3 - What Is the Long Term 2 Enhanced Surface Water Treatment Rule?

The purpose of the LT2ESWTR is to reduce illness linked with the contaminant *Cryptosporidium* and other microbial pathogens in drinking water. The LT2ESWTR will supplement existing regulations for surface water systems by targeting additional *Cryptosporidium* treatment requirements for systems with higher risk sources. It is important to note that the LT2ESWTR does not require additional *Cryptosporidium* treatment for all PWSs. Additional treatment is required only for those with higher risk sources found during LT2ESWTR monitoring. The LT2ESWTR also contains provisions to reduce risks resulting from uncovered finished water reservoirs and to ensure that systems maintain microbial protection as they take steps to decrease the formation of disinfection byproducts that result from chemical water treatment.

General Requirements

Complying with the LT2ESWTR, Published on January 5, 2006 (FR Volume 71, No. 3; page 767), requires systems to do the following:

- Collect source water samples and have those samples analyzed for *E. coli* or a state-approved alternate indicator.
- Collect source water samples and have those samples analyzed for *Cryptosporidium* if your source water *E. coli* (or alternate indicator) results exceed trigger levels or if you are an unfiltered utility and meet the filtration avoidance criteria.
- Provide additional treatment for *Cryptosporidium* if your source water *Cryptosporidium* results exceed certain levels or if you are an unfiltered utility and meet the filtration avoidance criteria.
- Use one of the options from the LT2ESWTR "Toolbox" to meet any additional *Cryptosporidium* treatment requirements.
- Meet new requirements to protect uncovered finished water storage reservoirs.
- Develop a disinfection profile and a disinfection benchmark and notify the state prior to making a significant change in disinfection practice(s).

- Keep records for some of the requirements listed above.

- Report source water *E. coli* and *Cryptosporidium* results, the use of uncovered finished water reservoirs, information on the toolbox options used (if any), and disinfection and benchmarking results (if any) to the primacy agency for your system.

Compliance Timetable for Systems Serving Fewer than 10,000 People

LT2ESWTR Requirement	Begin by	Complete by
Filtered systems must complete 12 months (at least once every two weeks) of source water monitoring for *E. coli* (or a state-approved alternate indicator)[1].	October 31, 2008 (§141.701 (a)(3)).	September 30, 2009.
Filtered systems exceeding *E. coli* (or a state-approved alternate indicator) triggers must conduct source water monitoring for *Cryptosporidium* at least twice per month for 12 months or at least once per month for 24 months.	April 30, 2010 (§141.701 (a)(4)).	May 31, 2011 (12 months of sampling). May 31, 3012 (24 months of sampling).
Unfiltered systems must conduct source water monitoring for *Cryptosporidium* at least twice per month for 12 months or at least once per month for 24 months.	April 30, 2010 (§141.701 (a)(2)).	May 31, 2011 (12 months of sampling). May 31, 2012 (24 months of sampling).
Filtered systems in Bin 2 and higher (See Step #6 for Bin Classification) and all unfiltered systems must meet the treatment technique requirements for *Cryptosporidium.*		September 30, 2014 (§141.713).
Systems must comply with the uncovered finished water storage facility requirements.	April 1, 2008[2] (§141.714 (b)).	April 1, 2009 (§141.714 (c)).
Systems that plan to make a significant change in their disinfection practice(s) after completing source water monitoring must develop a disinfection profile and calculate a disinfection benchmark. Systems must notify the state prior to making the change and provide the profile and benchmark and additional information to the state.	Prior to any significant change occurring after completing source water monitoring. (§141.708).	
Systems not required to monitor for *Cryptosporidium* must begin a second round of source water monitoring for *E. coli* (or a state-approved alternate indicator).	October 31, 2017 (§141.702 (b)).	September 30, 2018.
Unfiltered systems and systems required to monitor for *Cryptosporidium* must begin a second round of source water monitoring for *Cryptosporidium*.	April 30, 2019 (§141.701 (b)).	May 31, 2020 (12 months of sampling). May 31, 2021 (24 months of sampling).

[1]Systems that do not operate their plants year round must sample only during the months that the plant operates. Systems with plants that operate less than six months per year that monitor for *Cryptosproidium* must collect at least six samples per year during each of two years of operation. Samples must be evenly spaced through the periods the plant operates (§141.710 (e)).

[2]Systems with uncovered finished water reservoirs must notify the state of the use of any such reservoirs.

Wholesale systems must comply with the LT2ESTWR **based on the population of the largest system** in the combined distribution system. If you deliver water to another PWS serving more than 10,000 people, you must comply with the LT2ESWTR based on the requirements for systems serving more than 10,000 people. This will require you to begin complying **earlier than the deadlines** in this guide and will require you to conduct *Cryptosporidium* monitoring.

How Does this Rule Relate to Other Federal, State, and Local Requirements?

The LT2ESWTR and the Stage 2 DBP were published together to address the tradeoffs between protection from microbial contamination and the potential health effects from disinfectants and their byproducts. You are still required to continue to meet all existing federal requirements. You may call the Safe Drinking Water Hotline at (800) 426-4791 (email: hotline-sdwa@epa.gov) for more information on other drinking water rules.

This compliance guide explains your federal compliance obligations for the LT2ESTWTR. There may be additional state or local drinking water regulations for *Cryptosporidium* which apply to your plant which are different from, or more stringent than, the Federal requirements. For more information on the regulations that apply to your system in your state, please contact your state drinking water office. State contacts can be found in Appendix E or by calling the Safe Drinking Water Hotline at (800) 426-4791(e-mail: hotline-sdwa@epa.gov).

STEP #4 - What Source Water Monitoring Is Required?

E. coli (or state-approved alternate indicator) Source Water Monitoring for Filtered Systems

- Submit a sampling schedule and a sample location description for source water monitoring to your state by July 1, 2008 (§141.702).
- Collect source water samples for *E. coli* (or a state-approved alternate indicator) at least every two weeks for 12 months beginning no later than October 31, 2008 (§141.701 (c)).
- Collect source water samples from your plant intake prior to any chemical treatment and within two days of the dates in your sampling schedule (§141.702(b), §141.703).
- Submit a sampling schedule for a second round of source water monitoring to your state by July 1, 2017 (§141.702).
- Collect source water samples for *E. coli* (or a state-approved alternate indicator) at least every two weeks for 12 months beginning no later than October 31, 2017 (§141.701 (c)).
- Submit the results of *E. coli* monitoring no later than 10 days after the end of the first month following the month of the sampling (§141.706 (a)). The results of a sample collected in April would be due June 10th.

Is Source Water Monitoring Required for All Systems?

If you are required to provide filtration and your treatment system currently provides or will provide a total of at least 5.5 log treatment for *Cryptosporidium,* you are not required to conduct source water monitoring. You must notify your state by July 1, 2008 (§141.701 (d)). You may also stop monitoring for *Cryptosporidium* at any time if you notify the State in writing that you will provide this level of treatment. The treatment must be operational by October 1, 2014, unless the State approves an additional 2 years for capital improvements (§141.701 (d)).

Systems with More than One Surface Water Supply Source

If you have more than one surface water supply, you must do one of the following (§141.703(f)):

- Collect sample from a tap where all sources are combined.
- Composite samples from all sources. In a composite sample the volume of sample from each source must be weighted according to the proportion of each source in the total plant flow at the time of the sample. You should contact your state and laboratory for assistance.
- Collect and analyze a sample separately from each source and calculate a weighted average of all the results for the sampling date. You should contact your state and laboratory for assistance.

Problems Collecting Your Sample on the Required Date

If there are conditions that pose a danger to someone collecting samples or conditions that are unforseen and could not be avoided that prevent a sample from being collected, you must collect a sample as close to the schedule date as possible and submit an explanation for the new sampling date with the laboratory results from that sample (§141.702(b)(1)).

Systems Using Bank Filtration

- If you are using bank filtration followed by a filtration plant, you are required to collect samples from the well (after bank filtration) (§141.703(d)(2)).
- If you are receiving *Cryptosporidium* treatment credit under §141.173(b) or 141.552(a) for bank filtration, you are required to collect source water samples in the surface water before bank filtration (§141.703(d)(1)).

When Is Sampling for *Cryptosporidium* Source Water Required?

You are required to sample for *Cryptosporidium* if:

- You notify the State that you will monitor for *Cryptosporidium* instead of *E. coli*.
- You use a lake or reservoir as a source of supply and find an annual mean *E. coli* concentration of greater than 10 *E. coli*/100 ml from your initial monitoring unless the state has allowed you to use an alternate indicator (§141.701(a)(4)).
- You use a flowing stream as a source of supply and find an annual mean *E. coli* concentration of greater than 50 *E. coli*/100 ml from your initial monitoring unless the state has allowed you to use an alternate indicator (§141.701(a)(4)).
- You exceed a state-approved alternate indicator trigger level (or a state-approved alternate *E. coli* trigger level) (§141.701(a)(5)).
- You fail to complete the initial *E. coli* (or state-approved alternate indicator) monitoring (§141.701(a)(4)).

If you are an unfiltered system that meets the filtration avoidance criteria of §141.71, you are required to conduct *Cryptosporidium* monitoring. Go to **Step #5.** Unfiltered systems meeting the filtration avoidance criteria are not required to conduct *E. coli* (or state-approved alternate indicator) monitoring.

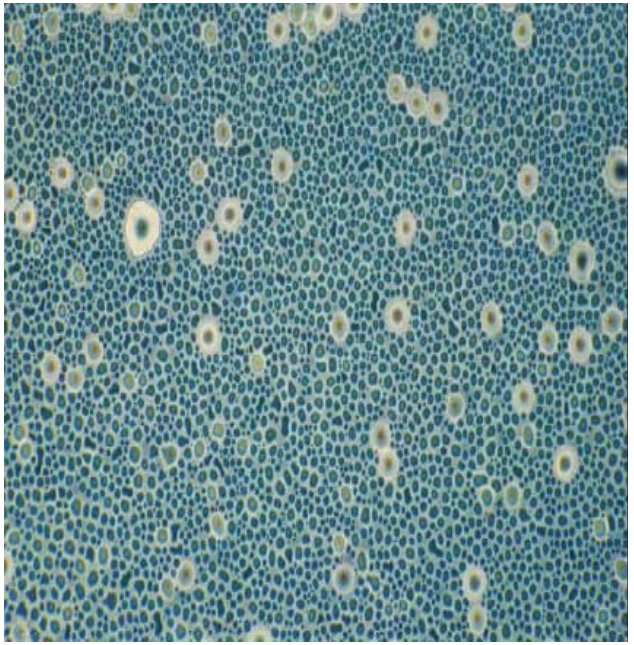
If your average *E. coli* level (or state-approved indicator level) is below the trigger levels, STOP HERE and go to Step #8.

STEP #5 - How Is Source Water *Cryptosporidium* Monitoring Conducted?

Cryptosporidium Monitoring for Unfiltered Systems and for Filtered Systems Exceeding *E. coli* (or state-approved indicator) Trigger Levels

If you are required to monitor for *Cryptosporidium* you must:

- Submit a sampling schedule and sample location description for source water monitoring to your state by January 1, 2010 (§141.702 (a)).
- Collect source water samples for *Cryptosporidium* at least twice each month for 12 months or at least monthly for 24 months beginning no later than April 30, 2010 (§141.701 (c)).
- Collect source water samples from your plant intake prior to any treatment and within 2 days of the dates in your sampling schedule (§141.702(b), §141.703).
- Submit a sampling schedule for a second round of source water monitoring to your state by January 1, 2019 (§141.702 (a)).
- Collect source water samples for *Cryptosporidium* at least twice each month for 12 months beginning no later than April 30, 2019 (§141.701 (c)).



You should contact one of the approved *Cryptosporidium* laboratories to arrange for analysis of your samples and to set a sampling schedule. You may contact the Safe Drinking Water Hotline at (800) 426-4791 for a list of approved laboratories. A list can also be found at www.epa.gov/safewater/disinfection/lt2/lab_aprvlabs.html.

STEP #6 - What Do the Results of *Cryptosporidium* Monitoring Mean for My Plant?

If you are required to monitor for *Cryptosporidium*, the results of monitoring are used to place your system in a bin and to determine the level of treatment required. The bin classifications are:

If your average source water *Cryptosporidium* concentration is:[1]	**Then your bin classification is:**
Less than 0.075 oocysts/L	Bin 1
Equal to or more than 0.075 oocysts/L but less than 1.0 oocysts/L	Bin 2
Equal to or more than 1.0 oocysts/L but less than 3.0 oocysts/L	Bin 3
Equal to or more than 3.0 oocysts/L	Bin 4

[1]*Cryptosporidium* bin concentration is determined by the number of samples taken and the frequency of sampling.

What Do the Bin Classifications Mean for My Plant?

If your system's bin classification is...	And you use one the following filtration treatments, then your additional treatment requirements under LT2ESWTR are...			
	Conventional filtration treatment (including softening)	Direct filtration	Slow sand or diatomaceous earth filtration	Alternative filtration technologies
Bin 1	No additional treatment	No additional treatment	No additional treatment	No additional treatment
Bin 2	1-log treatment	1.5-log treatment	1-log treatment	(1)
Bin 3	2-log treatment	2.5-log treatment	2-log treatment	(2)
Bin 4	2.5-log treatment	3-log treatment	2.5-log treatment	(3)

(1) As determined by the state such that the total *Cryptosporidium* removal and inactivation is at least 4.0-log.
(2) As determined by the state such that the total *Cryptosporidium* removal and inactivation is at least 5.0-log.
(3) As determined by the state such that the total *Cryptosporidium* removal and inactivation is at least 5.5-log.

What Do the Results of *Cryptosporidium* Monitoring Mean for Unfiltered Systems?

An unfiltered system that meets all filtration avoidance criteria of §141.71 must calculate the arithmetic mean of all *Cryptosporidium* sample results. Based on those results:

- Unfiltered systems with a mean *Cryptosporidium* concentration of 0.01 oocysts/L or less must provide at least 2-log *Cryptosporidium* inactivation (§141.712(b)(1)).

- Unfiltered systems with a mean *Cryptosporidium* concentration of greater than 0.01 oocysts/L must provide at least 3-log *Cryptosporidium* inactivation (§141.712(b)(2)).

STEP #7 - How Do I Meet the Additional Treatment Requirements for My Bin Classification?

To meet any additional *Cryptosporidium* treatment requirements you must use the microbial toolbox options listed in the following table that are designed, implemented, and operated in accordance with the requirements of the LT2ESTWR (§141.715). The LT2ESWTR Toolbox Guidance Manual (see Appendix D of this guide for more information) includes a detailed description of the Toolbox options as well as operational information, advantages, and disadvantages for each option.

Unfiltered systems must use chlorine dioxide, ozone, UV or a combination of these (see Inactivation Toolbox Components in the following table) to meet the *Cryptosporidium* inactivation requirements. Unfiltered systems must meet the combined *Cryptosporidium* inactivation requirements of the LT2ESWTR section and *Giardia lamblia* and virus inactivation requirements of §141.72(a) (SWTR) using a minimum of two disinfectants, and each of the two disinfectants must separately achieve the total inactivation required for either *Cryptosporidium*, *Giardia lamblia*, or viruses (§141.712).

Microbial Toolbox: Options, Credits and Criteria

Toolbox Option	*Cryptosporidium* treatment credit with design and implementation criteria
Source Protection and Management Toolbox Components	
(1) Watershed control program	0.5-log credit for state-approved program comprising EPA specified elements. Unfiltered systems are not eligible.
(2) Alternative source/intake management	Bin classification based on simultaneous *Cryptosporidium* monitoring at alternate source or under alternate intake management strategies.
Pre Filtration Toolbox Components	
(3) Presedimentation basin with coagulation	0.5-log credit during any month the basin achieves at least 0.5-log turbidity reduction or alternate state-approved performance criteria. Basin must be operated continuously with coagulant addition.
(4) Two-stage lime softening	0.5-log credit for two-stage softening with coagulant addition.
(5) Bank filtration	0.5-log credit for 25 foot setback; 1.0-log credit for 50 foot setback.
Treatment Performance Toolbox Components	
(6) Combined filter performance	0.5-log credit for combined filter effluent turbidity 0.15 NTU in 95% of samples each month.
(7) Individual filter performance	0.5-log credit (in addition to 0.5-log combined filter performance credit) for individual filter effluent turbidity 0.15 NTU in 95% of daily maximum samples each month and no filter >0.3 NTU in two consecutive measurements.
(8) Demonstration of performance	Credit awarded to a unit process or treatment train based on a demonstration to the state through state-approved protocol.
Additional Filtration Toolbox Components	
(9) Bag or Cartridge filters (individual filters)	Up to 2-log credit based on a demonstration of removal efficiency in challenge testing with a 1-log factor of safety.
(10) Bag or Cartridge filters (in series)	Up to 2.5-log credit based on a demonstration of removal efficiency in challenge testing with a 0.5-log factor of safety.
(11) Membrane filtration	Log removal credit up to the lower value of the removal efficiency demonstrated during the challenge test or verified by the direct integrity test applied to the system.
(12) Second stage filtration	0.5-log credit for a second separate filtration stage in treatment process following coagulation.
(13) Slow sand filters	2.5-log credit for second separate filtration process.
Inactivation Toolbox Components	
(14) Chlorine dioxide	Log credit based on monthly demonstration of compliance with CT table.
(15) Ozone	Log credit based on monthly demonstration of compliance with CT table.

What Are the Compliance Monitoring Requirements for Treatment/Disinfection?

If you are required to meet the requirements for treatment for *Cryptosporidium*, you must meet the compliance monitoring requirements for each toolbox option you use. The compliance monitoring requirements for the individual toolbox options can be found in §141.716 through §141.720 of the LT2ESWTR. The individual toolbox compliance monitoring requirements can also be found in the LT2ESWTR Toolbox Guidance Manual. You may call the Safe Drinking Water Hotline at (800) 426-4791 (e-mail: hotline-sdwa@epa.gov) to request a copy of the regulation. You may also download a copy of the regulation or the guidance manual at www.epa.gov/safewater/disinfection/lt2/index.html.

STEP #8 - What Are the Requirements for Uncovered Finished Water Storage Facilities?

If you are using an uncovered finished water storage facilities you must choose one of the following for the facility (§141.714):

- Cover any uncovered finished water storage facility.
- Treat the discharge from the uncovered finished water storage facility to the distribution system to achieve inactivation and/or removal of at least 4-log virus, 3-log *Giardia lamblia* and 2-log *Cryptosporidium* using a protocol approved by the state.

You must also:

- Notify the state of each uncovered finished water reservoir by April 1, 2008 (§141.714).
- Cover or treat the discharge from the reservoir or be in compliance with a state-approved schedule by April 1, 2009 (§141.714).

STEP #9 - What Must I Report and What Records Must I Keep in My Files?

The existing public notification rules (Subpart Q) require you to report certain information to the consumers served by your water system. The LT2ESWTR requires you to report certain information to the state (§141.721) and to keep additional records in your files (§141.722).

Public Notification to Consumers

Under the public notification rules (Subpart Q) you are required to provide public notification to consumers if you fail to complete the following requirements of the LT2ESWTR:

- Monitor your source water for *E. coli*, a state-approved alternate indicator, and (if you are required to do so) *Cryptosporidium*.
- Meet the treatment technique requirements of your bin classification.
- Meet the design, performance, and reporting requirements for the toolbox options you use to meet the treatment technique requirements.

You are required to include the results of source water monitoring for *Cryptosporidium* in your Consumer Confidence Report.

Information Reported to the State

In addition to the reporting requirements for all drinking water regulations (see 40 CFR §141.31), you must provide the following information to the state:

- You must submit your source water monitoring schedule and sample location description unless you do not plan to monitor and will instead meet the *Cryptosporidium* treatment requirements for your source (§141.702).

- You must submit your source water monitoring results to the state no later than 10 days after the end of the first month following the month when the sample was collected (§141.706 (a)). For example, samples collected in October 2008 must be reported by December 10, 2008.

- You must notify the state if you are using an uncovered finished water storage reservoir by April 1, 2008 (§141.714 (b)).

- If you are required to filter your source, you must report your bin classification to the state for approval no later than 6 months after you are required to complete initial source water monitoring (§141.710). If you monitored for *E. coli* and were not required to monitor for *Cryptosporidium*, your bin classification is Bin #1.

- If you are an unfiltered utility and meet the filtration avoidance criteria, you must report your mean source water *Cryptosporidium* concentration as well as a summary of source water monitoring used to calculate the mean to the state no later than September 30, 2012, for the first round of source water monitoring and September 30, 2019, for the second round of source water monitoring (§141.712).

- If you are required to meet the requirements for treatment for *Cryptosporidium*, you must meet the reporting requirements for each toolbox option you use. The reporting requirements for the individual toolbox options can be found in §141.721(f) of the LT2ESWTR. The individual toolbox reporting requirements can also be found in the LT2ESWTR Toolbox Guidance Manual. You may call the Safe Drinking Water Hotline at (800) 426-4791 (e-mail: hotline-sdwa@epa.gov) to request a copy of the regulation.

- If you plan to make a significant change in your disinfection practice(s) after completing source water monitoring, you must develop a disinfection profile and calculate a disinfection benchmark. You must notify the state prior to making the change and provide the profile and benchmark and additional information to the state. The disinfection profiling and benchmark requirements can be found in §141.708 and §141.709 of the LT2ESWTR.

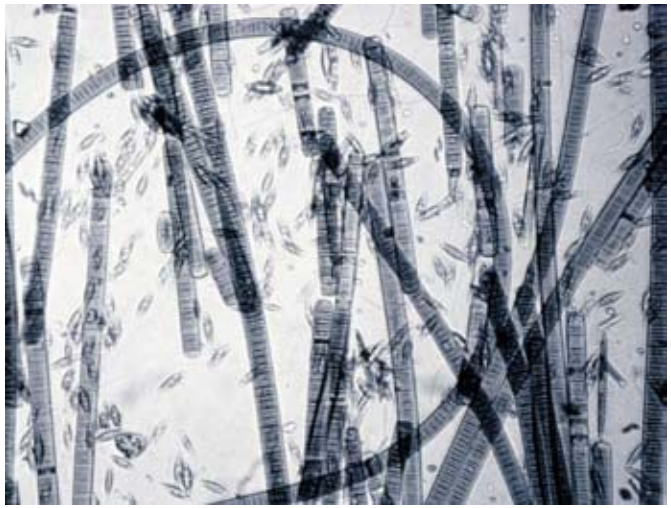
Records You Must Keep in Your Files

In addition to the record keeping requirements for all drinking water requirements (see 40 CFR §141.33), you must maintain the following information in your records (§141.722):

- Records of all source water monitoring until 3 years after bin classification determination for filtered systems or determination of the mean *Cryptosporidium* level for unfiltered systems for the particular round of monitoring.

- A record of notifying the state that you will not be conducting source water monitoring and that you will instead meet the *Cryptosporidium* treatment requirements for your source for 3 years.

- Records of treatment monitoring for the toolbox options and for any monitoring required for treatment for uncovered finished water reservoirs for 3 years.



STEP #10 - Where Do I Go for Help?

There are many sources of information available to help you meet the requirements in this rule.

- You can review EPA's guidance manuals (see Appendix D), contact EPA's regional drinking water offices, or EPA's Safe Drinking Water Hotline at (800) 426-4791 (e-mail: hotline-sdwa@epa.gov).

- You can contact your state drinking water agency.

- You can contact your state chapters of organizations such as the National Rural Water Association and the American Water Works Association which often offer technical assistance to small facilities.

Financial Assistance

Modifying or installing treatment, consolidating with another water system, and developing a new water source can be expensive. System improvements can be funded by raising rates, issuing bonds, or by successfully applying for loans or grants. The tables below provide information on some programs that may provide financial assistance to help you comply with the LT2ESWTR.

Major Providers of Financial Assistance to Drinking Water Systems

Name of Program	Description	Contact Information
Drinking Water State Revolving Fund (DWSRF)	The DWSRF makes low-interest and interest-free loans to water systems to finance infrastructure improvements. States can "set aside" funds from their annual EPA grant to provide technical assistance to small systems.	www.epa.gov/safewater/dwsrf/contacts.html Safe Drinking Water Hotline at (800) 426-4791
Rural Utilities Service (RUS) Water and Waste Disposal Loan and Grant Program	This program offers loans and grants to rural areas to develop water and waste-disposal systems and to reduce the user costs of these systems.	www.usda.gov/rus/water/states/usamap.htm (202) 720-9540
State-specific Programs	Your state may offer additional funding programs.	See Appendix E
Tribal-specific Programs	EPA makes direct grants (not loans) to Tribes through the DWSRF Tribal Set-Aside Program for improvements to water systems that serve Tribes. States and the Indian Health Service may provide additional financial assistance.	See Appendix E

Other Potential Sources of Financing or Financial Assistance to Drinking Water Systems

Name of Program	Description	Contact Information
Community Development Block Grants (CDBG)	This program offers grants to disadvantaged cities, urban counties, and states to develop viable urban communities.	www.hud.gov/offices/cpd/ (for specific state contact information) (202) 708-1112
Public Works and Infrastructure Development Grants	These grants help distressed communities overcome barriers that inhibit the growth of their local economies.	www.doc.gov/eda/HTML/1c_regloffices.htm (202) 482-5081
National Bank for Cooperatives Loan Program (CoBank)	CoBank provides loans to larger, creditworthy, and rural utilities.	www.cobank.com (800) 542-8072
Rural Community Assistance Corporation (RCAC)	RCAC provides loans to rural utilities in 11 western states to help meet the financing needs of rural communities and disadvantaged populations.	www.rcac.org/programs/serv-financial.html (916) 447-2854

Extensions for Systems that Need More Time to Comply

States may grant up to an additional 24 months for compliance with the treatment technique requirements of the LT2ESWTR, which are met with the “toolbox” in Step #7, to systems that require capital improvements to meet the treatment technique requirements.

STEP #11 - How Do I Protect My Source Water from Contamination?

If the state has a completed a Source Water Assessment for your source, it has identified potential contamination activities in the watershed for your source and/or near your intake. You may wish to review the assessment and discuss it with your state to determine what actions you can take to better protect your source water. Even if you do not control all the area surrounding your source water, you may be able to take some steps to protect it.

You can prevent fecal contamination from threatening your drinking water source by controlling or eliminating fecal sources in the watershed for your source and by protecting the watershed and your intake from fecal contamination. EPA's Source Water Assessment and Protection Program (SWAPP) encourage pollution prevention by requiring states to assess sources of public drinking water. To find out more about these programs and the tools that have been developed which may help you protect your source water, contact your state SWAPP or EPA's Safe Drinking Water Hotline at (800) 426-4791 (e-mail: hotline-sdwa@epa.gov). Information is also available at www.epa.gov/safewater/protect.html.

Appendix A: Glossary of Selected Terms Used in this Guide

Combined distribution system - The interconnected distribution system consisting of the distribution systems of wholesale systems and of the consecutive systems that receive finished water from those wholesale system(s).

Community water system - A public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year round residents.

Consecutive systems - Include all systems that buy or otherwise receive some or all of their finished water from another public water system on a regular basis.

CT - For a chemical disinfectant (chlorine, chloramine, ozone) the result of multiplying the disinfectant residual concentration, C, by the contact time, T, in the water system from the point where the disinfectant is applied to the point where the residual is measured.

Non-community water system - A public water system that is not a community water system.

Primacy agency - The agency with primary enforcement authority for the Safe Drinking Water Act. The primacy agency is referred to as the state in this document but this also refers to EPA and any tribal government responsible for implementing and enforcing the SDWA.

Sanitary survey - An onsite review of the water source (identifying sources of contamination by using results of source water assessments or other relevant information, where available), facilities, equipment, operation, maintenance, and monitoring compliance of a public water system to evaluate the adequacy of the system, its sources and operations and the distribution of safe drinking water.

Subpart H system - A public water system serving surface water or ground water under the influence of surface water. These systems are subject to the filtration and disinfection requirements of 40 CFR Subpart H.

UV disinfection - A disinfection process exposing the water supply to ultraviolet light (irradiation) to provide pathogen inactivation.

Wholesale system - A public water system that treats source water as necessary and then delivers finished water to another public water system. Delivery may be through a direct connection or through the distribution system of another consecutive system.

Appendix B: *E. coli* Sampling and Annual Mean

Example for *E. coli* Sampling and Annual Mean for a Lake/Reservoir Source (See LT2ESWTR Step Guide Step #4)

Step #1 - The results of all the samples for 12 months (2 samples each month) are added together.

Step #2 - The sum of all 24 samples is divided by 24 to get the annual mean.

For this example the system does not have to conduct *Cryptosporidium* monitoring since the annual mean is less than 10 *E. coli*/100mL.

Sample	*E. coli* Result (*E. coli*/100mL)
Month 1Sample #1	2
Month 1 Sample #2	3
Month 2 Sample #1	2
Month 2 Sample #2	4
Month 3 Sample #1	2
Month 3 Sample # 2	7
Month 4 Sample # 1	6
Month 4 Sample # 2	10
Month 5 Sample # 1	12
Month 5 Sample # 2	8
Month 6 Sample # 1	6
Month 6 Sample # 2	6
Month 7 Sample # 1	7

Sample	*E. coli* Result (*E. coli*/100mL)
Month 7 Sample # 2	8
Month 8 Sample # 1	12
Month 8 Sample # 2	8
Month 9 Sample # 1	8
Month 9 Sample # 2	7
Month 10 Sample # 1	12
Month 10 Sample # 2	7
Month 11 Sample # 1	7
Month 11 Sample # 2	9
Month 12 Sample # 1	3
Month 12 Sample # 2	8
Total for 24 Samples	**164**
Annual Mean (Total for 24 samples÷24)	**164/24=6.8**

Form for *E. coli* Sampling and Annual Mean (See LT2ESWTR Step Guide Step #4)

Step #1 - The results of all the samples for 12 months (2 samples each month) are added together.

Step #2 - The sum of all 24 samples is divided by 24 to get the annual mean.

Sample	*E. coli* Result (*E. coli*/100mL)
Month 1Sample #1	
Month 1 Sample #2	
Month 2 Sample #1	
Month 2 Sample #2	
Month 3 Sample #1	
Month 3 Sample # 2	
Month 4 Sample # 1	
Month 4 Sample # 2	
Month 5 Sample # 1	
Month 5 Sample # 2	
Month 6 Sample # 1	
Month 6 Sample # 2	
Month 7 Sample # 1	

Sample	*E. coli* Result (*E. coli*/100mL)
Month 7 Sample # 2	
Month 8 Sample # 1	
Month 8 Sample # 2	
Month 9 Sample # 1	
Month 9 Sample # 2	
Month 10 Sample # 1	
Month 10 Sample # 2	
Month 11 Sample # 1	
Month 11 Sample # 2	
Month 12 Sample # 1	
Month 12 Sample # 2	
Total for 24 Samples	
Annual Mean (Total for 24 samples/24)	

NOTE: This form may also be used for determining your bin placement after *Cryptosporidium* monitoring if you collect two *Cryptosporidium samples per month. If you collect more than two sample per month see the Source Water Monitoring Guidance for Public Water Systems for the Long Term 2 Enhanced Surface Water Treatment Rule* (www.epa.gov/safewater/disinfection/lt2/compliance/html).

Appendix C: System Source Sampling and Bin Placement

Example System Source Sampling and Bin Placement

The First Valley Water District serves 1,500 homes from its surface water treatment plant. The surface water treatment plant treats water from First Valley Creek and from Second Valley Spring. The state has determined that Second Valley Spring is under the direct influence of surface water. Raw water from First Valley Creek and from Second Valley Spring is combined in the inlet pipe to the water treatment plant.

The First Valley treatment plant is a conventional surface water treatment plant that consists of flocculation/sedimentation basins, sand filters, and a treated water tank for final disinfection. There is an upflow clarifier that is used seasonally when storms result in high raw water turbidity in First Valley Creek.

Since First Valley District serves less than 10,000 persons, the LT2ESWTR requires First Valley to sample the source water for *E. coli* at least once every two week for 12 months. Monitoring must begin no later than October 31, 2008. First Valley Water District is required to submit a sampling schedule to the state for approval no later than 3 months before it is required to begin sampling for *E. coli.*

Since water from First Valley Creek and from Second Valley Spring are combined before treatment and there is a sample tap in the raw inlet pipeline after they are combined, samples for *E. coli* are collected from the sample tap. (See Step #5 for cases where there is no sample tap available where multiple sources are combined prior to treatment. If you do not have a sample tap available where multiple sources are combined, you should consider installing one. A combined sample tap will reduce the work needed to report the results of sampling.)

The results of sampling for *E. coli* are shown on Sheet 1. First Valley Water District reports the results of the *E. coli* monitoring to the state. Since First Valley Creek is a flowing stream and the annual mean *E. coli* concentration is greater than 50 *E. coli*/100 mL, First Valley Water District is now required to sample the source water for *Cryptosporidium* at least twice a month for 12 months.

First Valley is required to submit a sampling schedule for *Cryptosporidium* to the state for approval by January 1, 2010. The results of sampling for *Cryptosporidium* are shown on Sheet 2. Since the mean *Cryptosporidium* concentration for the 12 months of sampling is greater than 0.075 oocysts/L but less than 1.0 oocysts/L, the bin classification for First Valley is Bin 2. First Valley uses conventional filtration treatment so the Bin 2 classification now requires First Valley to provide at least 1-log additional treatment for *Cryptosporidium* (see Steps 6 and 7).

First Valley is required to provide at least 1-log additional *Cryptosporidium* treatment by September 30, 2014. To meet this requirement, First Valley will choose from the LT2ESWTR Microbial Toolbox Options (see Step #7). First Valley may choose any Toolbox option of combination of Toolbox options to meet its *Cryptosporidium* treatment options. More information on the Microbial Toolbox Options can be found in the Microbial Toolbox Guidance Manual. Some (but not all) of the Toolbox options First Valley could consider to meet its *Cryptosporidium* treatment requirements include:

- Using the upflow clarifier full time as a pre-sedimentation basin. Pre-sedimentation basins are eligible for a 0.5-log *Cryptosporidium* credit if a coagulant is added continuously and certain performance conditions are met (see Step #7).

- Optimizing the filtration process to meet the conditions for the Combined Filter Performance 0.5-log *Cryptosporidium* credit.

- Adding a second filtration step after the existing filters. Second stage granular media filters are eligible for a 0.5-log *Cryptosporidium* treatments credit and second stage slow sand filters are eligible for a 2.5-log *Cryptosporidium* credit. *Cryptosporidium* treatment credits for bag, cartridge and membrane filters are based on a demonstration.

Sheet 1

First Valley Water District *E. coli* Sampling and Annual Mean (See LT2ESWTR Step Guide Step #4).

Step 1 - The results of all the samples for 12 months (2 samples each month) are added together.
Step 2 - The sum of all 24 samples is divided by 24 to get the annual mean.

Sample Number	Sample Result (CFU/100 mL)
Month 1 Sample #1	83
Month 1 Sample #2	20
Month 2 Sample #1	120
Month 2 Sample #2	56
Month 3 Sample #1	70
Month 3 Sample # 2	150
Month 4 Sample # 1	130
Month 4 Sample # 2	43
Month 5 Sample # 1	60
Month 5 Sample # 2	60
Month 6 Sample # 1	73
Month 6 Sample # 2	60
Month 7 Sample # 1	46
Month 7 Sample # 2	20

Sample Number	Sample Result (CFU/100 mL)
Month 8 Sample # 1	100
Month 8 Sample # 2	100
Month 9 Sample # 1	170
Month 9 Sample # 2	260
Month 10 Sample # 1	80
Month 10 Sample # 2	100
Month 11 Sample # 1	30
Month 11 Sample # 2	200
Month 12 Sample # 1	80
Month 12 Sample # 2	200
Total for 24 Samples	**2311**
Annual Mean (Total for 24 samples / 24	**2311/24=96**

Sheet 2

First Valley Water District *Cryptosporidium* Sampling and Annual Mean (See LT2ESWTR Step Guide Step #5).

Step 1 - The results of all the samples for 12 months (2 samples each month) are added together.
Step 2 - The sum of all 24 samples is divided by 24 to get the annual mean.

Sample Number	Sample Result (oocysts/L)
Month 1 Sample #1	0
Month 1 Sample #2	0
Month 2 Sample #1	2
Month 2 Sample #2	0
Month 3 Sample #1	2
Month 3 Sample # 2	2
Month 4 Sample # 1	4
Month 4 Sample # 2	0
Month 5 Sample # 1	0
Month 5 Sample # 2	0
Month 6 Sample # 1	2
Month 6 Sample # 2	0
Month 7 Sample # 1	0
Month 7 Sample # 2	0

Sample Number	Sample Result (oocysts/L)
Month 8 Sample # 1	2
Month 8 Sample # 2	0
Month 9 Sample # 1	0
Month 9 Sample # 2	2
Month 10 Sample # 1	0
Month 10 Sample # 2	0
Month 11 Sample # 1	3
Month 11 Sample # 2	2
Month 12 Sample # 1	2
Month 12 Sample # 2	0
Total for 24 Samples	**23**
Annual Mean (Total for 24 samples / 24	**23/24=0.96**

Appendix D: Where to Obtain More Information

EPA has developed a series of guidance manuals to support the Long Term 2 Enhanced Surface Water Treatment Rule. The manuals will aid EPA, state agencies, and you in implementing the rule and will help to ensure consistent implementation.

Consider the Source: A Pocket Guide to Protecting Your Source: Drinking Water Pocket Guide #3. For states, public water systems, local governments and consumers. This guide includes a discussion of Clean Water Act and Safe Drinking Water Act based regulatory and voluntary resources, tools, and management measures available for protecting drinking water sources. The Guide also includes available Best Management Practices for source water protection areas. An electronic version is available at www.epa.gov/safewater/protect/swpocket.html

Microbial and Disinfection Byproduct Rules Simultaneous Compliance Guidance Manual (EPA 817-D-06-003). For primacy agencies and public water systems. This draft guidance manual for PWSs affected by the rule describes potential conflicts that may arise as systems take steps to comply with the LT2ESWTR and the Stage 2 DBPR and provides examples of approaches systems can take to resolve those conflicts. The manuals offers tools that can be used to determine if treatment changes may result in simultaneous compliance problems and provides information on helpful resources. An electronic version is available at www.epa.gov/safewater/disinfection/lt2/compliance.html

Uncovered Finished Water Reservoirs Guidance Manual (EPA 815-R-99-011). For primacy agencies and public water systems. The purpose of this document is to provide a basic understanding of the potential sources of external contamination in uncovered finished water reservoirs and to provide guidance to water treatment operators for evaluating and maintaining water quality in these reservoirs. An electronic version is available at http://www.epa.gov/ogwdw/mdbp/pdf/uncover/ufw8p.pdf

Public Notification Handbook (EPA 816-R-00-010). For public water systems required to provide public notification. This handbook provides instructions and includes templates that public water systems can use for various types of public notification. An electronic version is available at www.epa.gov/safewater/pws/pn/handbook.pdf

Surface Water Treatment Rule Guidance Manual. For primacy agencies and public water systems. This manual provides guidance on the applicability and regulatory requirements of the Surface Water Treatment Rule including the filtration and disinfection requirements for systems supplying surface water. The Appendices provide the basis for CT values and include guidance for determining disinfection contact, measuring disinfectant residual and means for providing redundant disinfection capability. The Appendices also include CT tables for the inactivation of Giardia and viruses for chlorine, chlorine dioxide, and ozone.

Pocket Sampling Guide for Operators of Small Water Systems (EPA 814-B-92-001). For operators of small Community Water Systems (Serving Fewer Than 3,300 People). This concise, conveniently sized guide helps operators easily learn how to comply with the monitoring requirements of the 1986 Safe Drinking Water Act Amendments. It covers most sampling requirements for regulations promulgated under the 1986 Amendments, including the Volatile Organic Chemicals Rule, the Total Coliforms Rule, the Surface Water Treatment Rule, and Lead And Copper Regulation. Ordering instruction are available at http://yosemite.epa.gov/water/owrccatalog.nsf/e673c95b11602f2385256ae1007279fe/4b18ffbd40e357f885256b060072478a!OpenDocument

Source Water Monitoring Guidance for Public Water Systems for the Long Term 2 Enhanced Surface Water Treatment Rule (EPA 815-R-06-005). For primacy agencies and public water systems. This guidance manual for PWSs affected by the rule. It provides information on laboratory contracting, sample collection procedures, and data evaluation and interpretation. An electronic version is available at www.epa.gov/safewater/disinfection/lt2/compliance.html

UV Disinfection Guidance Manual (EPA 815-R-06-007). For primacy agencies and public water systems. This manual provides guidance on the selection, design, and operation of ultraviolet disinfection to comply with treatment requirements under the rule. An electronic version is available at www.epa.gov/safewater/disinfection/lt2/compliance.html

Membrane Filtration Guidance Manual (EPA 815-R-06-009). For primacy agencies and public water systems. This draft manual provides guidance on the selection, design, and operation of membrane filtration to comply with treatment requirements under the rule. An electronic version is available at www.epa.gov/safewater/disinfection/lt2/compliance.html

Long Term 2 Enhanced Surface Water Treatment Rule Toolbox Guidance Manual (in development). For primacy agencies and public water systems. This draft manual provides guidance on the selection, design, and operation of treatment and management strategies in the LT2ESWTR "microbial toolbox" to comply with treatment requirements under the rule. This manual is currently in development.

For more information, contact EPA's Safe Drinking Water Hotline at (800) 426-4791, or see the Office of Ground Water and Drinking Water Web page at www.epa.gov/safewater/disinfection/index.html. To order a copy of one of these guidance manuals you may contact the US EPA Water Resource Center at (202) 566-1729 or by mail at:

US Environmental Protection Agency
Water Resource Center (RC-4100)
1200 Pennsylvania Ave NW,
Washington DC 20460
E-mail: center.water.resource@epa.gov

Appendix E: SDWA Primacy Agencies and Tribal Contacts

Safe Drinking Water Act Primacy Agency Contacts.
For additional information or to learn more about the laws in your own state, please contact your state Primacy Agency.

EPA REGION 1	**www.epa.gov/region1/eco/drinkwater/index.html**	**(617) 918-1584**
Connecticut Department of Public Health: Drinking Water Division	www.dph.state.ct.us/BRS/water/dwd.htm	(860) 509-7333
Maine Maine Department of Human Services: Drinking Water Program	www.state.me.us/dhs/eng/water/index.htm	(207) 287-2070
Massachusetts Department of Environmental Protection: Drinking Water Program	www.mass.gov/dep/brp/dws/dwshome.htm	(617) 292-5770
New Hampshire Department of Environmental Services: Water Division	www.des.state.nh.us/wseb/	(603) 271-2513
Rhode Island Department of Health: Office of Drinking Water Quality	www.health.ri.gov/environment/dwq/index.php	(401) 222-6867
Vermont Vermont Agency of Natural Resources	www.anr.state.vt.us/dec/watersup/wsd.htm	(802) 241-3400
EPA REGION 2	**www.epa.gov/region02/water/drinkingwater/**	**(212) 637-3879**
New Jersey Department of Environmental Protection: Water Supply Administration	www.state.nj.us/dep/watersupply/	(609) 292-5550

New York Department of Health: Bureau of Water Supply Protection	www.health.state.ny.us/nysdoh/water/main.htm	(518) 402-7650
Puerto Rico Department of Health: Public Water Supply Supervision Program	www.epa.gov/region02/cepd/prlink.htm	(787) 977-5870
Virgin Islands Department of Planning & Natural Resources: Division of Environmental Protection	www.dpnr.gov.vi/dep/home.htm	(340) 773-1082
EPA REGION 3	**www.epa.gov/reg3wapd/drinkingwater/**	**(215) 814-5806**
Delaware Delaware Health & Social Services: Division of Public Health	www.state.de.us/dhss/dph/about.html	(302) 744-4700
District of Columbia Environmental Health Administration: Water Resources Management Division	www.epa.gov/reg3wapd/drinkingwater/	(215) 814-5806
Maryland Department of the Environment: Public Drinking Water Program	www.mde.state.md.us/programs/WaterPrograms/Water_Supply/index.asp	(410) 537-3000
Pennsylvania Department of Environmental Protection: Office of Water Management	www.dep.state.pa.us/dep/deputate/watermgt/wsm/WSM.htm	(717) 772-4018
Virginia Department of Health: Office of Drinking Water	www.vdh.state.va.us/dw/index.asp	(804) 864-7500
West Virginia Bureau for Public Health: Department of Health and Human Resources	www.wvdhhr.org/oehs/eed/	(304) 558-6715
EPA REGION 4	**www.epa.gov/region4/water/**	**(404) 562-9345**
Alabama Department of Environmental Management: Water Supply Branch	www.adem.state.al.us/WaterDivision/Drinking/DWMainInfo.htm	(334) 271-7700

Florida Department of Environmental Protection: Drinking Water Program	www.dep.state.fl.us/water/drinkingwater/index.htm	(850) 245-8335
Georgia Department of Natural Resources: Water Resources Branch	www.gaepd.org	(404) 657-5947
Kentucky Department for Environmental Protection: Division of Water	www.water.ky.gov/dw	(502) 564-3410
Mississippi Department of Health: Division of Water Supply	www.msdh.state.ms.us/msdhsite/index.cfm/44.0.76.html	(601) 576-7518
North Carolina Department of Environment and Natural Resources: Public Water Supply Section	www.deh.enr.state.nc.us/pws/	(919) 733-2321
South Carolina Department of Health & Environmental Control: Drinking Water Program	www.scdhec.net/eqc/water/html/dwater.html	(803) 898-4300
Tennessee Department of Environment & Conservation: Division of Water Supply	www.state.tn.us/environment/dws/index.html	(615) 532-0191
EPA REGION 5	**www.epa.gov/r5water/**	**(312) 886-4239**
Illinois Environmental Protection Agency: Division of Public Water Supplies	www.epa.state.il.us/water/index-pws.html	(217) 785-8653
Indiana Department of Environmental Management: Drinking Water Branch	www.in.gov/idem/water/dwb	(317) 232-8603
Michigan Department of Environmental Quality: Water Bureau	www.michigan.gov/deq	(517) 373-7917

Minnesota Department of Health: Drinking Water Protection Section	www.health.state.mn.us/divs/eh/water/index.html	(651) 215-0770
Ohio Environmental Protection Agency: Division of Drinking & Ground Water	www.epa.state.oh.us/ddagw/	(614) 644-2752
Wisconsin Department of Natural Resources: Drinking Water and Ground Water	www.dnr.state.wi.us/org/water/dwg/	(608) 266-0821
EPA REGION 6	**www.epa.gov/region6/water**	**(214) 665-2757**
Arkansas Department of Health: Division of Engineering	www.healthyarkansas.com/eng/index.html	(501) 661-2623
Louisiana Office of Public Health: Safe Drinking Water Program	www.oph.dhh.louisiana.gov/engineerservice/safewater	(225) 765-5038
New Mexico Environment Department: Drinking Water Bureau	www.nmenv.state.nm.us/dwb/dwbtop.html	(505) 827-1400
Oklahoma Department of Environmental Quality: Water Quality Division	www.deq.state.ok.us/WQDnew/index.htm	(405) 702-8100
Texas Texas Commission on Environmental Quality	www.tceq.state.tx.us/nav/util_water/	(512) 239-4691
EPA REGION 7	**www.epa.gov/region7/water/dwgw.htm**	**(913) 551-7030**
Iowa Department of Natural Resources: Water Supply Program	www.iowadnr.com/water/drinking/index.html	(515) 725-0275
Kansas Department of Environmental Protection: Bureau of Water	www.kdhe.state.ks.us/pws/	(785) 296-5503
Missouri Department of Natural Resources: Water Protection and Soil Conservation Division	http://www.dnr.mo.gov/wpscd/wpcp/dw-index.htm	(573) 751-1300

Nebraska Department of HHS: Public Water Supply Program	www.hhs.state.ne.us/enh/pwsindex.htm	(402) 471-0521
EPA REGION 8	**www.epa.gov/region08/water/**	**(303) 312-7021**
Colorado Department of Public Health & Environment: Drinking Water Program	http://www.cdphe.state.co.us/wq/Drinking_Water/Drinking_Water_Program_Home.htm	(303) 692-3500
Montana Department of Environmental Quality: Public Water Supply Program	www.deq.state.mt.us/wqinfo/PWS/index.asp	(406) 444-4071
North Dakota Department of Health: Division of Water Quality	www.health.state.nd.us/mf	(701) 328-5211
South Dakota Department of Environment & Natural Resources: Drinking Water Program	www.state.sd.us/denr/des/drinking/dwprg.htm	(605) 773-3754
Utah Department of Environmental Quality: Division of Drinking Water	www.drinkingwater.utah.gov	(801) 536-4200
Wyoming EPA Region VIII: Wyoming Drinking Water Program	www.epa.gov/region08/water/dwhome/wycon/wycon.html	(303) 312-6812
EPA REGION 9	**www.epa.gov/region9/water/index.html**	**(415) 744-1884**
American Samoa Environmental Protection Agency	http://www.epa.gov/safewater/dwinfo/samoa.htm	(684) 633-2304
Arizona Department of Environmental Quality: Safe Drinking Water Section	www.azdeq.gov/environ/water/dw/index.html	(602) 771-2300
California Department of Health Services: Division of Drinking Water & Environmental Management	http://www.dhs.ca.gov/ps/ddwem/technical/dwp/dwpindex.htm	(916) 449-5577
Guam Guam Environmental Protection Agency: Water Programs Division	www.guamepa.govguam.net/programs/water	(671) 475-1658

Hawaii Department of Health: Environmental Health Division	www.hawaii.gov/health/environmental/water/sdwb/index.html	(808) 586-4258
Nevada Department of Environmental Services: Safe Drinking Water Program	http://ndep.nv.gov/bsdw/index.htm	(775) 687-6353
EPA REGION 10	**www.epa.gov/region10/**	**(206) 553-1389**
Alaska Department of Environmental Management: Water Supply Branch	www.state.ak.us/dec/eh/dw	(907) 269-7647
Idaho Department of Environmental Quality: Water Quality Division	www.deq.state.id.us/water/	(208) 373-0194
Oregon Department of Human Services: Drinking Water Program	http://oregon.gov/DHS/ph/dwp/index.shtml	(971) 673-0405
Washington Department of Environmental Health: Office of Drinking Water	www.doh.wa.gov/ehp/dw/	(360) 236-3100

Tribal Contacts

For additional information or to learn more about the laws governing your tribe, use the contact information provided below.

US EPA Headquarters	**Web site**	**Phone Number**
American Indian Environmental Office	www.epa.gov/indian	(202) 564-0303
US EPA Regional Tribal Capacity Development Coordinators	**Web site**	**Phone Numbers**
EPA Region 1	www.epa.gov/region01/topics/government/tribal.html	(888) 372-7341
EPA Region 2	www.epa.gov/region02/nations/index.html	(212) 637-3600
EPA Region 4	www.epa.gov/region04/ead/indian/index.htm	(404) 562-6939
EPA Region 5	www.epa.gov/region5/water/stpb	(312) 353-2123
EPA Region 6	www.epa.gov/region06/6xa/tribal.htm	(800) 887-6063
EPA Region 7	www.epa.gov/region07/government_tribal/index.htm	(913) 551-7030
EPA Region 8	www.epa.gov/region08/tribes	(303) 312-6116
EPA Region 9	www.epa.gov/region09/cross_pr/indian/index.html	(415) 744-1500
EPA Region 10	yosemite.epa.gov/r10/tribal.NSF/webpage/tribal+office+homepage?opendocument	(206) 553-4011
Other Contacts	**Web site**	**Phone Numbers**
Administration for Native Americans	www.acf.dhhs.gov/programs/ana	(877) 922-9262
Bureau of Indian Affairs	www.doi.gov/bureau-indian-affairs.html	(202) 208-3710
Indian Health Service	www.ihs.gov	(301) 443-3024
Native American Water Association	www.nawainc.org	(775) 782-6636

APPENDIX F: Other STEP Documents Available from EPA

This guide is one in a series of Simple Tools for Effective Performance (STEP) documents for small drinking water systems. Several other available STEP Guides are listed below. To obtain currently available STEP documents or to check on the availability of documents listed as under development, call the Safe Drinking Water Hotline at 1-800-426-4791 or go to http://www.epa.gov/safewater/smallsys/ssinfo.htm.

TOOLS TO HELP IMPLEMENT REGULATIONS

A Small Systems Guide to the Total Coliform Rule
Publication number: EPA 816-R-01-017A, June 2001
http://www.epa.gov/safewater/smallsys/small-tcr.pdf

Complying with the Revised Drinking Water Standard for Arsenic
Publication number: EPA 816-R-02-008A, August 2002
http://www.epa.gov/safewater/arsenic/pdfs/ars_final_app_f.pdf

Complying with the Stage 1 Disinfectants and Disinfection Byproducts Rule: Basic Guide
(This guide also includes supplements A and B)
Publication number: EPA 816-B-05-004, March 2006
http://www.epa.gov/safewater/mdbp/pdfs/guide_stage1_basic_final.pdf

Small Systems Guide to Safe Drinking Water Regulations
Publication number: EPA 816-R-03-017, September 2003
http://www.epa.gov/safewater/smallsys/pdfs/guide_smallsystems_sdwa.pdf

TOOLS TO HELP MANAGE SMALL SYSTEMS

Strategic Planning: A handbook for small water systems
Publication number: EPA 816-R-02-005, September 2003
http://www.epa.gov/safewater/smallsys/pdfs/guide_smallsystems_stratplan.pdf

Asset Management: A handbook for small water systems
Publication number: EPA 816-K-02-006, September 2003
http://www.epa.gov/safewater/smallsys/pdfs/guide_smallsystems_asset_mgmnt.pdf

Sources of Technical and Financial Assistance
Publication number: EPA 816-K-02-005, July 2002
http://www.epa.gov/safewater/smallsys/pdfs/tfa_sdws.pdf